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Production of Λ (Σ^{o})-hyperons and K^{o}-mesons in interactions between 7 Gev. π^{-}-mesons and carbon. Zhur. eksp. i teor. fiz. 46 no.5:1586-1597 My '64. (MIRA 17:6)

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1. Joint Institute of Nuclear Research, Laboratory of High-Energy Computer Center, Laboratory of Theoretical Physics, Dubna, U.S.S.R.

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Study of Λ-hyperon and K^o-meson production in π^--p-interactions at an energy of 7 - 8 Billion Electron Volts. Zhur.eksp. i teor. fiz. 44 no.2:431-443 F '63. (MIRA 16:7)

1. Ob"yedinennyy institut yadernykh issledovaniy. 2. Sotrudnik Instituta atomnoy fiziki v Bukhareste (for Mikhul).

L 23730-66 EWT(m)/T
ACC NR: AP6014814 SOURCE CODE: UR/0367/65/001/002/0338/0350

AUTHOR: Belyakov, V. A.; Veksler, V. I.; Viryasov, N. M.; Kladnitskaya, Ye. N.--Kladnitskaya, E. N.; Kopylov, G. I.; Penev, V. N.; Solov'yev, M. I.--Solovyev, M. I.

ORG: Joint Institute of Nuclear Research (Ob"yedinennyy institut yadernykh issledovaniy)

TITLE: Baryon resonances in pi- p-interactions at 7.5 GEV with formation of strange particles

SOURCE: Yadernaya fizika, v. 1, no. 2, 1965, 338-350

TOPIC TAGS: baryon, meson, particle interaction, strange particle, hyperon, particle cross section

ABSTRACT: The formation and properties of resonances decaying into Λ-hyperons and $\pi\pm$- mesons were studied. Data are given on the formation cross sections for Y+ (1385) and Y+ (1660)-hypersons in π- p-interactions at 7.5 GEV/c. The properties and formation characteristics of Y+ (1385)-hyperons and their decay products were investigated. The maximum in the mass spectrum $M_{\Lambda\pi^+\pi^-}$ at the value 1770 MEV was discussed. The authors thank Professor M. I. Podgoretskiy and Professor I. V. Chuvilo for their interest in the work and their discussions; A. Mikhul, Nugen Din Ty, A. A. Kuznetsov, Ye. S. Sokolova, Du Yuan'-tsay, Van Yun-chan and Kim Khi In for taking part in the first stage of the work. Further thanks is rendered N. F. Markov and V. Ye. Komolov, co-workers at the Computer Center, for carrying out the calculations and the group

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of laboratory workers for the measurements. The authors also thank ~~V. G. Grishin,~~ A. V. Nikitin, E. G. Bubelev, and I. Kurelar for discussing the various problems of this work. Orig. art. has: 9 figures, 2 formulas, and 4 tables. [Based on authors' Eng. abst.] [JPRS]

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L 23731-66 EWT(m)/T

ACC NR: AP6014815 SOURCE CODE: UR/0367/65/001/002/0351/0365

AUTHOR: Belyakov, V. A.; Veksler, V. I.; Viryasov, N. M.; Kladnitskaya, Ye. N.--Kladnitskaya, E. N.; Kopylov, G. I.; Penev, V. N.; Solov'yev, M. I.--Solovyev, M. I.

ORG: Joint Institute of Nuclear Research (Ob"yedinennyy institut yadernykh issledovaniy)

TITLE: Meson resonances in pi- p-interactions at 7.5 GEV with formation of strange particles 19 19 50 34 B

SOURCE: Yadernaya fizika, v. 1, no. 2, 1965, 351-365

TOPIC TAGS: pi meson, strange particle, particle interaction, K meson, mass spectrum

ABSTRACT: Resonances decaying into K° ($\bar{K}$°, K+) and π-mesons are investigated. Cross sections are given for the formation of K* (888) and k (730) -mesons in π- p-interactions at 7.5 GEV/c in events with $K\bar{K}$ pairs, and the contribution (in %) of k°, K*°-mesons in events with Λ K+ pairs is evaluated. Properties and formation characteristics of K*±-mesons are described. Mass-spectra of the K2 π and K3 π systems are investigated. The possibility of the formation of a new resonance U - K° + $\pi^{\pm}$ + $\pi^{\pm}$ + $\pi^{\pm}$ with mass 1660 MEV is indicated. An attempt is made to determine its quantum numbers. Proofs are given for the production of a resonance with mass 1050 MEV, decaying into three π-mesons ($\pi^+\pi^+\pi^-$), which can be identified as the A_1-meson.

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ACC NR: AP6014815

The authors thank Professor M. I. Podgoretskiy and Professor I. V. Chuvilo for their interest in the work and for the discussions; A. Mikhul, Ngen Din Ty, A. A. Kuznetsov, Ye. S. Sokolova, Du Yuan'-tsay, Van Yun-chan and Kim Khi In for taking part in the first stage of the work. Further thanks is rendered to the co-workers at the Computer Center, N. F. Markov and V. Ye. Komolov, for carrying-out the calculations and the group of laboratory workers for the measurements. The authors also thank A. V. Nikitin, V. G. Grishin, E. G. Bubelev, and I. Kurolar for discussing the various problems of this work. Orig. art. has: 13 figures and 3 tables. [Based on authors' Eng. abst.] [JPRS]

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Card 2/2

BELYAKOV, V.A.; VEKSLER, V.I.; VIRYASOV, N.M.; KLADNITSKAYA, Ye.N.; KOPYLOV, G.I.; MIKHUL, A. [Michul, A.]; PENEV, V.N.; SOKOLOVA, Ye.S.; SOLOV'YEV, M.I.

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(Automobiles--Ignition)

EXCERPTA MEDICA Sec 14 Vol.10/4 Radiology Apr 56

667. VIRZHIKOVSKAYA M.F. *Motoric disturbances in duodenum in cases of cholecystitis with stones (Russian text) KLIN. MED. (Mosk.) 1955, 33/6 (53-63) Illus. 8

X-ray examinations in 38 cases of cholecystitis with stones and in 12 cases with[illegible] stones are reported. The diagnosis was surgically verified in all cases. A ring-shaped cramp was always present in the duodenojejunal curve, sometimes als[illegible] the region of Vater's papilla. Peristalsis in the vertical region of the duodenum was segmental, but in the lower horizontal part there were coarse oscillatory movements while antiperistaltic waves were often seen in the bulbus duodeni. [illegible] duodenum thus is not a passive, but an active organ.

Hirvonen - Hels[illegible]

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UdSSR, Frunse, Akademie der Wissenschaften der Kirgisischen SSR; Leningrad VNIMI.

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(OXYURIASIS
in horses, ther., piperazine)
(NEMATODE INFECTIONS
in horses, ther., piperazine)
(HELMINTH INFECTIONS
in horses, ther., piperazine)
(PIPERAZINES, ther. use
helminth & nematode infect. in horses)
(HORSES, dis.
helminth & nematode infect., ther., piperazine)

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13. "Diabetes Insipidus in a Bitch" B. [illegible], Clinical Center of the Veterinary Department of FAC-B (Abbr. not identified) Ljubljana; pp 1037-1039.

14. "Bovine Psoroptosis" K. [illegible] and M. [illegible], Vet. Institute People's Republic of Serbia, Belgrade; pp 1041-1042.

15. "Localisation of Pathologic Changes in Amidostomosis" V. VISACKI; Veterinary Station Mramorak; pp 1043-1044.

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VISACKI, V.
SURNAME (in caps); Given Names

(1)

Country: Yugoslavia

Academic Degrees: /not given/

Affiliation: Veterinary Station (Veterinarska stanica), Mramorak

Source: Belgrado, Veterinarski glasnik, No 8, 1961, pp 677-679.

Data: "Contribution to the Understanding of Epizootiology of Fowl Cholera."

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VISACKI, V.
SURNAME (in caps); Given Names

Country: Yugoslavia

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Affiliation: Veterinary Station (Veterinarska stanica), Mramorak

Source: Belgrade, Veterinarski glasnik, No 9, 1961, pp 773-774.

Data: "A Case of Aquariasis /?/ in Fowl."

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Investigation of the semi-invariants of the statistical-geometric analogy for thin elastic shells of isotropic and orthotropic materials. Acta techn Hung 28 no.1/2:199-207 '60. (EEAI 9:7)

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(Elasticity)

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Extension of static-geometric analogy to thin elastic shells with anisotropy of material. p.329

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Uncl.

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S/040/61/025/001/008/022
B125/B204

AUTHORS: Visarion, V., Stenescu, Kr. (Bukharest)

TITLE: Investigation of the quasiinvariants of the static-geometric analogy for thin elastic shells

PERIODICAL: Prikladnaya matematika i mekhanika, v. 25, no. 1, 1961, 68-75

TEXT: The authors apply the methods developed in previous papers to orthotropic shells and find the factor $\frac{2h^2\sqrt{E_\alpha E_\beta}}{\sqrt{3(1-\mu_\alpha\mu_\beta)}}$, by means of which systems of equilibrium equations and continuity equations may be united to a single complex system. Besides, the Hooke equations may in this way be reduced to a system of three linear equations without differential between the complex stresses. The previous papers mentioned are by A. L. Gol'denveyzer dealing with isotropic shells, and by V. V. Novozhilov dealing with the static-geometric analogy. In the first part

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Investigation of the quasiinvariants ... S/040/61/025/001/008/022
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of the paper the quasiinvariants are dealt with. According to static-geometric analogy, the stresses, moments, stress functions, displacements, and deformation components, which enter into the homogeneous equations of the theory of thin shells, may be divided into two groups: Here, one element of the second group containing displacements and deformations corresponds to each element of the first, containing stresses, moments, and stress functions. The ratio (element e of the first group / element e^* of the second group) has the dimension of a force. The complex elements then have the form $S_e = e + i\xi(e)e^*$. As quasiinvariant, a complex element (1.1) is described, to which the same element multiplied by a constant factor corresponds in static-geometric analogy. The authors then investigate the conditions at which S_e is a quasiinvariant. The conditions of quasiinvariance read $S_e = KS_e^*$ or also $e + i\xi(e)e^* = K[e^* + i\xi^*(e)e]$. Herefrom, one obtains by comparing coefficients $1 = Ki\xi^*(e)$, $i\xi(e) = K$, and further $\xi^*(e) = -1/\xi(e)$ (1.5). $\xi(e)$ has the dimension of a force: $|\xi(e)| = |F|$. The most general expression composed of all constants entering the static-geometric

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analogy has the form (1.7).

$$\xi(e) = F_1^{m} F_2^{m'} D_1^{p} D_2^{p'} \left(\frac{A_{12}}{A_{22}}\right)^{q} \left(\frac{A_{21}}{A_{22}}\right)^{q'} \left(2\frac{A_{13}}{A_{22}}\right)^{r} \left(2\frac{A_{23}}{A_{22}}\right)^{r'} \left(2\frac{A_{31}}{A_{22}}\right)^{s} \left(2\frac{A_{32}}{A_{22}}\right)^{s'} \times$$
$$\times \left(4\frac{A_{33}}{A_{22}}\right)^{t} \left(\frac{a_{12}}{a_{11}}\right)^{u} \left(\frac{a_{21}}{a_{11}}\right)^{u'} \left(-\frac{a_{13}}{a_{11}}\right)^{v} \left(-\frac{a_{23}}{a_{11}}\right)^{v'} \left(-\frac{a_{31}}{a_{11}}\right)^{z} \left(-\frac{a_{32}}{a_{11}}\right)^{z'} \left(\frac{a_{33}}{a_{11}}\right)^{w} \quad (1.7)$$

Here, $\xi(e)$ is assumed to be independent of the selected element, and then $m=m'$, $p=p'$, $q=q'$, $r=r'$, $s=s'$, $u=u'$, $v=v'$, $z=z'$ must hold; herefrom follows (1.8).

Отсюда

$$\xi = (F_1F_2)^{m} (D_1D_2)^{p} \left(\frac{A_{12}A_{21}}{A_{22}^2}\right)^{q} \left(4\frac{A_{13}A_{23}}{A_{22}^2}\right)^{r} \left(4\frac{A_{31}A_{32}}{A_{22}^2}\right)^{s} \left(4\frac{A_{33}}{A_{22}}\right)^{t} \times$$
$$\times \left(\frac{a_{12}a_{21}}{a_{11}^2}\right)^{u} \left(\frac{a_{13}a_{23}}{a_{11}^2}\right)^{v} \left(\frac{a_{31}a_{32}}{a_{11}^2}\right)^{z} \left(\frac{a_{33}}{a_{11}}\right)^{w} \quad (1.8)$$

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Further, we write ξ for $\xi(e)$. In the case of (1.5) there follows $q = -u$, $r = -v$, $s = -z$, $t = -w$, and herefrom (1.9).

$$\xi = \left(\frac{F_1F_2}{D_1D_2}\right)^{1/4} \left(\frac{A_{12}A_{21}}{a_{12}a_{21}}\,\frac{a_{11}^2}{A_{22}^2}\right)^{q} \left(4\,\frac{A_{13}A_{23}}{a_{13}a_{23}}\,\frac{a_{11}^2}{A_{22}^2}\right)^{r} \left(4\,\frac{A_{31}A_{32}}{a_{31}a_{32}}\,\frac{a_{11}^2}{A_{22}^2}\right)^{s} \left(4\frac{A_{33}}{a_{33}}\frac{a_{11}}{A_{22}}\right)^{t} \quad (1.9)$$

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q,r,s,t here remain arbitrary. If ξ is defined in such a manner that $S_e = e + i\xi e'$ is a quasiinvariant, then also $S_e' = e + i\xi^{\lambda} e'$ is a quasiinvariant, if λ is dimensionless. In static-geometric analogy it corresponds to the condition $\lambda \longleftrightarrow 1/\lambda$. Therefore, the indefinite factors may be omitted in (1.9), and it then follows that $\xi = (F_1F_2/D_1D_2)^{1/4}$ (1.11). With the notation used in the appendix there follows $\xi = 2h^2 \sqrt[4]{\frac{1}{9}\frac{A_{11}}{a_{11}}\frac{A_{22}}{a_{22}}}$ (1.12), and if the technical constants are used: $\xi = 2h^2\sqrt{\frac{E_\alpha E_\beta}{3\Delta_1}} \sqrt[4]{(1-\eta_\alpha\nu_\alpha)(1-\eta_\beta\nu_\beta)}$ (1.13), where

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$$\Delta_1 = \begin{vmatrix} 1 & -\mu_\alpha & \eta_\alpha \\ -\mu_\beta & 1 & \eta_\beta \\ \nu_\alpha & \nu_\beta & 1 \end{vmatrix}$$

(1.14). Above all, one obtains for isotropic and orthotropic shells $\xi = \frac{2h^2E}{\sqrt{3(1-\mu^2)}}$ and $\xi = \frac{2h^2\sqrt{E_\alpha E_\beta}}{\sqrt{3(1-\mu_\alpha\mu_\beta)}}$ respectively. The groups of the relations corresponding to one another in static-geometric analogy may be united into quasiinvariant complex systems, where the newly introduced functions turn out to be quasi-invariants. Thus, the systems of the equations of stress equilibrium and the equations for the continuity of deformations are in this way united to one single system, where the new unknown quantities are complex:

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$$
\begin{gathered}
\frac{\partial}{\partial\alpha}(BT_1)+\frac{\partial A}{\partial\beta}S_1-\frac{\partial}{\partial\beta}(AS_2)-\frac{\partial B}{\partial\alpha}T_2-AB\left(\frac{N_1}{R_1'}-\frac{N_2}{R_{12}}\right)+ABX=0\\
\frac{\partial}{\partial\alpha}(BS_1)-\frac{\partial A}{\partial\beta}T_1+\frac{\partial}{\partial\beta}(AT_2)-\frac{\partial B}{\partial\alpha}S_2-AB\left(\frac{N_2}{R_2'}-\frac{N_1}{R_{12}}\right)+ABY=0\\
AB\left(\frac{T_1}{R_1'}+\frac{T_2}{R_2'}+\frac{S_2-S_1}{R_{12}}\right)+\frac{\partial}{\partial\alpha}(BN_1)+\frac{\partial}{\partial\beta}(AN_2)+ABZ=0\\
\frac{\partial}{\partial\alpha}(BH_1)+\frac{\partial A}{\partial\beta}G_1-\frac{\partial}{\partial\beta}(AG_2)-\frac{\partial B}{\partial\alpha}H_2+ABN_2=0\\
\frac{\partial}{\partial\alpha}(BG_1)-\frac{\partial A}{\partial\beta}H_1+\frac{\partial}{\partial\beta}(AH_2)-\frac{\partial B}{\partial\alpha}G_2-ABN_1=0\\
S_1+S_2+\frac{H_1}{R_1'}+\frac{H_2}{R_2'}+\frac{G_2-G_1}{R_{12}}=0 \qquad (2.1)
\end{gathered}
$$

Здесь

$$
\begin{aligned}
&\boldsymbol{T}_1=T_1+i\xi\varkappa_2, \quad &&\boldsymbol{S}_1=S_1+i\xi\tau^{(2)}, \quad &&\boldsymbol{N}_1=N_1-i\xi\zeta_2\\
&\boldsymbol{T}_2=T_2+i\xi\varkappa_1, \quad &&\boldsymbol{S}_2=S_2+i\xi\tau^{(1)}, \quad &&\boldsymbol{N}_2=N_2+i\xi\zeta_1\\
&\boldsymbol{G}_1=G_1+i\xi e_2, \quad &&\boldsymbol{H}_1=H_1-i\xi\omega^{(2)}\\
&\boldsymbol{G}_2=G_2+i\xi e_1, \quad &&\boldsymbol{H}_2=H_2-i\xi\omega^{(1)}
\end{aligned}
\qquad (2.2)
$$

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In addition, there is $\vec{H}_1 + \vec{H}_2$. Also the relations between the stresses and stress functions on the one hand, and the relations between the deformations and displacements on the other hand, may be combined to one single system between complex stresses and complex stress functions:

$$T_1 = \frac{1}{B}\frac{\partial}{\partial\beta}\left(\frac{1}{B}\frac{\partial c}{\partial\beta} + \frac{b}{R_2'} - \frac{a}{R_{12}}\right) + \frac{1}{AB}\frac{\partial B}{\partial\alpha}\left(\frac{1}{A}\frac{\partial c}{\partial\alpha} + \frac{a}{R_1'} - \frac{b}{R_{12}}\right) - \frac{n}{R_{12}} \quad 2.4$$

$$T_2 = \frac{1}{A}\frac{\partial}{\partial\alpha}\left(\frac{1}{A}\frac{\partial c}{\partial\alpha} + \frac{a}{R_1'} - \frac{b}{R_{12}}\right) + \frac{1}{AB}\frac{\partial A}{\partial\beta}\left(\frac{1}{B}\frac{\partial c}{\partial\beta} + \frac{b}{R_2'} - \frac{a}{R_{12}}\right) + \frac{n}{R_{12}}$$

$$S_1 = -\frac{1}{B}\frac{\partial}{\partial\beta}\left(\frac{1}{A}\frac{\partial c}{\partial\alpha} + \frac{a}{R_1'} - \frac{b}{R_{12}}\right) + \frac{1}{AB}\frac{\partial B}{\partial\alpha}\left(\frac{1}{B}\frac{\partial c}{\partial\beta} + \frac{b}{R_2'} - \frac{a}{R'_2}\right) + \frac{n}{R_2}$$

$$S_2 = \frac{1}{A}\frac{\partial}{\partial\alpha}\left(\frac{1}{B}\frac{\partial c}{\partial\beta} + \frac{b}{R_2'} - \frac{a}{R_{12}}\right) - \frac{1}{AB}\frac{\partial A}{\partial\beta}\left(\frac{1}{A}\frac{\partial c}{\partial\alpha} + \frac{a}{R_1'} - \frac{b}{R_{12}}\right) + \frac{n}{R_1'}$$

$$N_1 = -\frac{1}{B}\frac{\partial n}{\partial\beta} - \frac{1}{R_2'}\left(\frac{1}{A}\frac{\partial c}{\partial\alpha} + \frac{a}{R_1'} - \frac{b}{R_{12}}\right) - \frac{1}{R_{12}}\left(\frac{1}{B}\frac{\partial c}{\partial\beta} + \frac{b}{R_2'} - \frac{a}{R_{12}}\right)$$

$$N_2 = \frac{1}{A}\frac{\partial n}{\partial\alpha} - \frac{1}{R_1'}\left(\frac{1}{B}\frac{\partial c}{\partial\beta} + \frac{b}{R_2'} - \frac{a}{R_{12}}\right) - \frac{1}{R_{12}}\left(\frac{1}{A}\frac{\partial c}{\partial\alpha} + \frac{a}{R_1'} - \frac{b}{R_{12}}\right)$$

$$G_1 = \frac{1}{B}\frac{\partial b}{\partial\beta} + \frac{1}{AB}\frac{\partial B}{\partial\alpha} \text{[illegible]} \frac{c}{R_2'} \qquad H_1 = -\frac{1}{B}\frac{\partial \text{[illegible]}}{\partial\beta} - \frac{1}{AB}\frac{\partial \text{[illegible]}}{\partial\alpha} b + \frac{c}{R_{12}} - n$$

$$G_2 = \frac{1}{A}\frac{\partial a}{\partial\alpha} + \frac{1}{AB}\frac{\partial A}{\partial\beta} b - \frac{c}{R_1'} \qquad H_2 = -\frac{1}{A}\frac{\partial b}{\partial\alpha} + \frac{1}{AB}\frac{\partial A}{\partial\beta} a - \frac{c}{R_{12}} - n$$

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Здесь

$$a = a + i\xi u, \quad b = b + i\xi v, \quad c = c + i\xi w \tag{2.5}$$

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Investigation of the quasiinvariants ...

$n = \frac{1}{2AB}\left[\frac{\partial}{\partial\beta}(Aa) - \frac{\partial}{\partial\alpha}(Bb)\right]$ (2.6). Next, equations with various quantities are investigated. According to the results of the foregoing paragraph, it is possible to write down the Hooke equations as three linear relations without differential, which connect the complex moments $\vec{G}_1$, $\vec{G}_2$, $\vec{H}_1$ and the complex stresses $\vec{T}_1$, $\vec{T}_2$, $\vec{S}_2$ with one another.

$$G_1 = -\frac{2h^3}{3} A_{22}\left(\frac{A_{11}}{A_{22}}\varkappa_1 + \frac{A_{12}}{A_{22}}\varkappa_2 + 2\frac{A_{13}}{A_{22}}\tau\right)$$

$$G_2 = -\frac{2h^3}{3} A_{22}\left(\frac{A_{21}}{A_{22}}\varkappa_1 + \varkappa_2 + 2\frac{A_{23}}{A_{22}}\tau\right)$$

$$H_1 = -H_2 = \frac{2h^3}{3} A_{22}\left(\frac{A_{31}}{A_{22}}\varkappa_1 + \frac{A_{32}}{A_{22}}\varkappa_2 + 2\frac{A_{33}}{A_{22}}\tau\right)$$

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Investigation of the quasiinvariants ... S/040/61/025/001/008/022
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$$G_1 = \frac{ic_3}{2}\{a_{21}[(1+\lambda_1)T_1 + (1-\lambda_1)\overline{T}_1] + a_{22}[(1+\lambda_2)T_2 + (1-\lambda_2)\overline{T}_2] + a_{23}[(1+\lambda_3)S_1 + (1-\lambda_3)\overline{S}_1]\}$$

$$G_2 = \frac{ic_3}{2}\left\{a_{11}\left[\left(1+\frac{1}{\lambda_1}\right)T_1 + \left(1-\frac{1}{\lambda_1}\right)\overline{T}_1\right] + a_{12}[(1+\lambda_4)T_2 + (1-\lambda_4)\overline{T}_2] + a_{13}[(1+\lambda_5)S_1 + (1-\lambda_5)S_1]\right\};$$

$$H_1 = \frac{ic_3}{4}\{a_{31}[(1+\lambda_6)T_1 + (1-\lambda_6)\overline{T}_1] + a_{32}[(1+\lambda_7)T_2 + (1-\lambda_7)\overline{T}_2] + a_{33}[(1+\lambda_8)S_1 + (1-\lambda_8)\overline{S}_1]\}$$

где *where*

$$c_3 = h\sqrt[4]{\frac{A_{11}A_{22}}{9a_{11}a_{22}}}, \quad \lambda_1 = \frac{A_{12}}{a_{21}}\sqrt{\frac{a_{11}a_{21}}{A_{11}A_{22}}}, \quad \lambda_2 = \sqrt{\frac{A_{11}a_{11}}{A_{22}a_{22}}}$$

$$\lambda_3 = -\frac{2A_{12}}{a_{13}}\sqrt{\frac{a_{11}a_{22}}{A_{11}A_{22}}}, \quad \lambda_4 = \frac{A_{21}}{a_{12}}\sqrt{\frac{a_{11}a_{22}}{A_{11}A_{22}}}, \quad \lambda_5 = -\frac{2A_{22}}{a_{13}}\sqrt{\frac{a_{11}a_{22}}{A_{11}A_{22}}}$$

$$\lambda_6 = -\frac{2A_{12}}{a_{31}}\sqrt{\frac{a_{11}a_{22}}{A_{11}A_{22}}}, \quad \lambda_7 = -\frac{2A_{21}}{a_{32}}\sqrt{\frac{a_{11}a_{22}}{A_{11}A_{22}}}, \quad \lambda_8 = \frac{4A_{22}}{a_{33}}\sqrt{\frac{a_{11}a_{22}}{A_{11}A_{22}}}$$

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Investigation of the quasiinvariants ... S/040/61/025/001/008/022
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Thus, the systems (2.1), (2.4), and (3.1) combine all principal equations of the theory of thin homogeneous shells. There are 11 references: 8 Soviet-bloc and 2 non-Soviet-bloc.

SUBMITTED: March 28, 1960

Card 10/10

VISARION, V.; DREGICHESKU, D. [Draghicescu, D.]

Computation of rotary cement furnaces with rigidity rings.
Rev mec appl 8 no.3:481-500 '63.

VISARION, V.; DRAGHICESCU, D.

Computation of rotative clinker kilns with stiffening rings.
Studii cerc mec apl 13 no.4:865-882 '62.

22248
A/008/60/000/005/007/014
A231/A126

10.9100

AUTHORS: Visarion, V., and Stănescu, C.

TITLE: On the formal reduction of the state of over-all stress of thin elastic shells to the state of pure "quasi-invariable" moments

PERIODICAL: Studii şi Cercetări de Mecanică Aplicată, no. 5, 1960, 1195-1199

TEXT: In a previous paper the same authors (Ref. 1: V. Visarion, C. Stănescu, Teoria cvasiinvariantilor analogiei statico-geometrice pentru învelitorile anizotrope, P. M. M. Moscova, sub tipar) have introduced the "quasi-invariable" concept for shells of non-isotropic material and have shown the existence of a complex quasi-invariable expression for equations of the theory of thin shells and boundary conditions. The system of equilibrum equations in forces and moments, and the equations of the distortion continuity are comprised in a system

$$\frac{\partial}{\partial\alpha}(B\widetilde{\mathfrak{N}}_{\alpha})+\frac{\partial A}{\partial\beta}\widetilde{\mathfrak{N}}_{\alpha\beta}-\frac{\partial}{\partial\beta}(A\widetilde{\mathfrak{N}}_{\beta\alpha})-\frac{\partial B}{\partial\alpha}\widetilde{\mathfrak{N}}_{\beta}-AB\left(\frac{\widetilde{Q}_{\alpha}}{R_1}-\frac{\widetilde{Q}_{\beta}}{R_{12}}\right)=0;$$

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$$\frac{\partial}{\partial\alpha}(B\widetilde{\mathfrak{N}}_{\alpha\beta}) - \frac{\partial A}{\partial\beta}\widetilde{\mathfrak{N}}_{\alpha} + \frac{\partial}{\partial\beta}(A\widetilde{\mathfrak{N}}_{\beta}) - \frac{\partial B}{\partial\alpha}\widetilde{\mathfrak{N}}_{\beta\alpha} - AB\left(\frac{\widetilde{Q}_{\beta}}{R_2} - \frac{\widetilde{Q}_{\alpha}}{R_{12}}\right) = 0,$$

$$AB\left(\frac{\widetilde{\mathfrak{N}}_{\alpha}}{R_1} + \frac{\widetilde{\mathfrak{N}}_{\beta}}{R_2} + \frac{\widetilde{\mathfrak{N}}_{\beta\alpha} - \widetilde{\mathfrak{N}}_{\alpha\beta}}{R_{12}}\right) + \frac{\partial}{\partial\alpha}(B\widetilde{Q}_{\alpha}) + \frac{\partial}{\partial\beta}(A\widetilde{Q}_{\beta}) = 0, \qquad (1)$$

$$\frac{\partial}{\partial\alpha}(B\widetilde{\mathfrak{M}}_{\alpha\beta}) + \frac{\partial A}{\partial\beta}\widetilde{\mathfrak{M}}_{\alpha} - \frac{\partial}{\partial\beta}(A\widetilde{\mathfrak{M}}_{\beta}) - \frac{\partial B}{\partial\alpha}\widetilde{\mathfrak{M}}_{\beta\alpha} + AB\widetilde{Q}_{\beta} = 0,$$

$$\frac{\partial}{\partial\alpha}(B\widetilde{\mathfrak{M}}_{\alpha}) - \frac{\partial A}{\partial\beta}\widetilde{\mathfrak{M}}_{\alpha\beta} + \frac{\partial}{\partial\beta}(A\widetilde{\mathfrak{M}}_{\beta\alpha}) - \frac{\partial B}{\partial\alpha}\widetilde{\mathfrak{M}}_{\beta} - AB\widetilde{Q}_{\alpha} = 0,$$

$$\widetilde{\mathfrak{N}}_{\alpha\beta} + \widetilde{\mathfrak{N}}_{\beta\alpha} = 0.$$

The supplementary quasi-invariable equations $\widetilde{\mathfrak{M}}_{\alpha\beta} + \widetilde{\mathfrak{M}}_{\beta\alpha} = 0$. (2) is attached to this system. Hooke's law can be expressed by three non-differential quasi-invariable equations, which connect the complex forces and moments. These complementary equations are:

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On the formal reduction of the state of...

$$\widetilde{\mathfrak{M}}_{\alpha} = i\frac{h}{\sqrt{3(1-\mu^2)}}(\widetilde{\mathfrak{N}}_{\beta} - \mu\widetilde{\widetilde{\mathfrak{N}}}_{\alpha}),$$
$$\widetilde{\mathfrak{M}}_{\beta} = i\frac{h}{\sqrt{3(1-\mu^2)}}(\widetilde{\mathfrak{N}}_{\alpha} - \mu\widetilde{\widetilde{\mathfrak{N}}}_{\beta}), \quad (3)$$
$$\widetilde{\mathfrak{M}}_{\alpha\beta} = i\frac{h}{\sqrt{3(1-\mu^2)}}(\widetilde{\mathfrak{N}}_{\alpha\beta} + \mu\widetilde{\mathfrak{N}}_{\alpha\beta}).$$

The limit conditions can be expressed in a complex form. In the present article the authors show, on the basis of the above equations, that the theory of thin elastic isotropic shells applied to forces and moments can be expressed only by the quasi-invariable moments, the moments acting on a membraneless shell, the median surface of which maintains the geometry of the median surface of the shell, but provided with imaginary thickness and modified elastic characteristics. For this purpose, the authors introduce:

$$h_* = i\sqrt{\frac{h}{3(1-\mu^2)}} \quad (4),$$

h_* being the semi-thickness of the membraneless shell. Then, considering $\mu_* = -\mu$, to be the Poisson coefficient for the membraneless shell, the equations (3) obtain the form of the expressions

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$$\widetilde{\mathfrak{M}}_{\alpha} = -\frac{2Eh_{*}^{3}}{3(1-\mu_{*}^{2})}(\chi_{1}^{*} + \mu_{*}\chi_{2}^{*}), \quad \widetilde{\mathfrak{M}}_{\beta} = -\frac{2Eh_{*}^{3}}{3(1-\mu_{*}^{2})}(\chi_{2}^{*} + \mu_{*}\chi_{1}^{*})$$

$$\widetilde{\mathfrak{M}}_{\alpha\beta} = 2Eh_{*}^{3}\frac{1}{1+\mu_{*}}\tau^{*}. \quad (7)$$

These equations are identical with the equations of Hooke, which connect the moments with the bending components of the distortion. The values χ_1^*, χ_2^*, and τ^*, represent the components of the bending distortion of the membraneless shell. Introducing the relations (5) into the first three equations of (1), one obtains the relations

$$-\frac{\partial}{\partial\alpha}(B\chi_{2}^{*}) + \frac{\partial A}{\partial\beta}\tau^{*} + \frac{\partial}{\partial\beta}(A\tau^{*}) + \frac{\partial B}{\partial\alpha}\chi_{1}^{*} - AB\left(\frac{\zeta_{2}^{*}}{R_{1}'} + \frac{\zeta_{1}^{*}}{R_{12}}\right) = 0,$$

$$\frac{\partial}{\partial\alpha}(B\tau^{*}) + \frac{\partial A}{\partial\beta}\chi_{2}^{*} - \frac{\partial}{\partial\beta}(A\chi_{1}^{*}) + \frac{\partial B}{\partial\alpha}\tau^{*} + AB\left(\frac{\zeta_{1}^{*}}{R_{2}'} + \frac{\zeta_{2}^{*}}{R_{12}}\right) = 0, \quad (8)$$

$$-AB\left(\frac{\chi_{2}^{*}}{R_{1}'} + \frac{\chi_{1}^{*}}{R_{2}'} + \frac{2\tau^{*}}{R_{12}}\right) + \frac{\partial}{\partial\alpha}(B\zeta_{2}^{*}) - \frac{\partial}{\partial\beta}(A\zeta_{1}^{*}) = 0,$$

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after considering the law of Hooke for complex cutting forces

$$\left.\begin{aligned} \widetilde{Q}_\alpha &= \frac{2Eh_*^2}{3(1-\mu_*^2)} \zeta_2^*, \\ \widetilde{Q}_\beta &= -\frac{2Eh_*^2}{3(1-\mu_*^2)} \zeta_1^*. \end{aligned}\right\} (9)$$

The system (8) coincides with the continuity equations of the distortion, which connects the components of the bending distortion. For the membraneless shell, there is a Hooke's law between the complex cutting forces and the values ζ_1^*, ζ_2^*. Thus, the fourth and the fifth equations of the system (1) have to be solved, to which the equations (2), (7) and (8) will be attached. The limit conditions can be transcribed in values which are specific for the new expression, starting from the quasi-invariable limit conditions. This expression simplifies the calculation; however it is necessary to mention several calculation rules for the value of μ_*. If λ is an arbitrary complex value, then $i\mu_*\lambda = -\mu_* i\lambda$, and then $h_*\mu_*\lambda = -\mu_* h_*\lambda$, μ is anticommutative by multiplying it with h_*. It also results: $\mu_*^2 = \mu_*\mu_* = \mu^2$.
There are 3 Soviet-bloc references.

SUBMITTED: March 12, 1960

Card 5/5

VISARION, V.

"Calculation of thin elastic coverings having small curvature and orthotropic material"

p. 1029 (Comunicarile, Vol. 7, Nc. 12, Dec. 1957, Bucharest, Rumania)

Monthly Index of East European Accessions (EEAI) LC, Vol. 8, No. 1, Jan. 58.

VISARION, V. (Bukharest); STENESKU, Kr. [Stănescu, C.] (Bukharest)

Investigating quasivariants of statical geometrical analogies for thin elastic shells. Prikl. mat. i mekh. 25 no.1:68-75 Ja-F '61. (MIRA 14:6)

(Elastic plates and shells)

VISARION, V.; DRAGHICESCU,D.

Computing rotary kilns for clinker. Studii cerc mec apl 13 no.1:105-135 '62.

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R001860020018-5"

VISARION, V., STANESCU, C.

Anew method for computing cylincrical envelopes of a circular section with orthotropy of material. p. 1173.

Academia Republicii Populare Romine. Institutul de Mecancia Aplicata. STUDII SI CERCETARI DE MECANICA APLICATA. Bucuresti, Rumania. Vol. 8, No. 4, 1957

Monthly List of East European Accessions (EEAI) LC, Vol. 8, No. 8, Aug. 1959
Uncl.

VISARION, V.

State of stresses and moments of thin spherical surfaces. p. 535.

Academia Republicii Populare Romine. Institutul de Mecanica Aplicata. STUDII SI CERCETARI DE MECANICA APLICATA, Bucuresti. Vol. 6, no. 3/4, July/Dec. 1955.

So. East European Accessions List Vol. 5, No. 9 September, 1956

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R001860020018-5"

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R001860020018-5"

VISARION, V.

Thin roof coverings in the form of hyperbolic paraboloids.

P. 443 (Academia Republicii Populare Romine. Institutul de Mecanica Aplicata. STUDII SI CERCETARI DE MECANICA APLICATA. Vol. 7, no. 2, Apr./June 1956, Bucuresti, Romania)

Monthly Index of East European Accessions (EEAI) LC. Vol. 7, no. 2, February 1958

VISARION, V.

A method for the dynamic calculations of tubes and cylindrical shells.

p. 491 (Academia Republicii Populare Romine. Institutul de Mecanica Aplicata. Studii Si Cercetari De Mecanica Aplicata. Vol. 8, no. 2, 1957. Bucuresti, Rumania)

Monthly Index of East European Accessions (EEAI) LC. VOL. 7, no. 2, February 1958

DIMITROV, D.; STRATIEV, V.; PARUSHEV, P.; VISARIONOV, V.

Production of zinc sulfate in the zinc hydrometallurgy.
Khim i industriia 34 no. 1: 30-33 '64.

DIMITROV, D., inzh.; PARUSHEV, P., inzh.; VISARIONOV, V., inzh.; PARAPITEV, Tsv., inzh.

Constructing more effectively working cooling systems for fluidized bed kilns and their increased productivity. Min delo 18 no.9:19-22 S '63.

1. Olovno-tsinkov zavod, Kurdzhali.

VISBARAITE, Ya. I.

"Splitting-up into triplets of the carbon atoms in the configuration $1s^2 2s^2 2p3p$." by Ya. I Visbaraite (p 265)

SO: Zhurnal Eksperimentalnoi i Teoreticheskoi Fiziki, 1953
Vol 24 #3

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R001860020018-5"

VISCA, Aldo, dr.; QUERCI, Mario, dr.; HARKANYI, Istvan, dr.; AMASIO, Claudio, dr.

Certain problems of anesthesia in neurosurgery. Magy.sebeszet 13 no.5:332-340 O '59.

1. A Torino-i Tudomanyegyetem Altalanos Sebeszeti Klinikajanak (Igazgato: Achille Mario Dogliotti dr. egyet. tanar) es Anaesthesiologus Szakorvoskepesito Iskolajanak Iskolavezeto: Enrico Ciocatto dr. egyet. m. tanar) kozlemenye.

(NEUROSURGERY anesth & analg)

QUERCI, Mario, Dr.; VISCA, Aldo, Dr.; HARKANYI, Istvan, Dr.; AMASIO, Claudio, Dr.

General anesthesia in pediatric surgery. Magy. sebeszet 12 no.1: 69-74 Mar 59.

1. A torinoi Tudomanyegyetem Altalanos Sebeszeti Klinikajanak (Igazgato: Dogliotti Achille Mario dr. egyetemi tanar) es Anaesthesiologus Szakorvoskepzo Iskolajanak (Iskolavezeto: Ciocatto Enrico dr. egyet. m. tanar) kozlemenye.

(PEDIATRICS, surg.
anesth., general (Hun))
(ANESTHESIA
in pediatric surg. (Hun))

QUERCI, Mario, Dr.; VISCA, Aldo, Dr.; HARKANYI, Istvan, Dr.

Peridural anesthesia in prostatectomy. Magy. sebeszet 12 no.2:144-149 Mar 59.

1. A Torinoi Tudomanyegyetem Altalanos sebeszeti Klinikajanak (Igazgato: Dogliotti Achille Mario dr. Egyetemi tanar) es Anaesthesiologus Szakorvoskepzo Iskolajanak (Iskolaveszeto: Ciocatto Enrico dr. egyetemi m. tanar) kozlemenye.

(PROSTATECTOMY
peridural anesth. (Hun))
(ANESTHESIA, SPINAL
peridural in prostatectomy (Hun))

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S/058/62/000/006/064/136
A061/A101

24.7700

AUTHORS: Viscakas, J., Stonkus, S.

TITLE: Growth and some physical properties of CdSe single crystals

PERIODICAL: Referativnyy zhurnal, Fizika, no. 6, 1962, 11, abstract 6E89 ("Uch. zap. Vil'nyussk. un-t. Matem., fiz.," 1960, v. 33, no. 9, 149 - 160, Lith.; Russian summary)

TEXT: CdSe single crystals were grown by the Frerikhs method. The most convenient way of growing the single crystals was found to be CdSe sublimation. The single crystals, grown in H_2 with a Cl_2 admixture (type A) possessed higher dark resistance and higher relative photosensitivity, than those grown in pure H_2 (type B). Dark current, photocurrent, and the index, m, of the lux-ampere characteristic were found to have maximum values within a definite temperature range. The forbidden band width, determined from the red boundary of photoconductivity, diminishes with temperature increase. In the range of 291 - 78°K it narrows down at a rate of 0.00033 - 0.00023 ev/deg. The relaxation of photoconductivity of CdSe single crystals follows a power law at room temperature. Oc-

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A061/A101

Growth and some physical properties...

casionally, two relaxation times are observed in photocurrent growth: 1 - 2 and 4 - 8 msec. The relaxation time of photoconductivity drop is 0.2 - 0.6 msec. There are 24 references.

[Abstracter's note: Complete translation]

L 29609-66 EWT(m)/EWP(t)/ETI IJP(c) JD
ACC NR: AT6012819 SOURCE CODE: UR/2910/65/005/001/0109/0114

AUTHOR: Vishchakas, Yu. K.; Viscakas, J.; Kavalyauskene, G. S.; Kavaliauskiene, G.

ORG: Vilnius State University im. V. Kapsukas (Vil'nyusskiy Gosudarstvennyy universitet) 57 B+1

TITLE: Investigation of dark relaxation of the electrostatic potential in xerographic selenium layers 16

SOURCE: AN LitSSR. Litovskiy fizicheskiy sbornik, v. 5, no. 1, 1965, 109-114

TOPIC TAGS: electrophotography, relaxation process, dark current, selenium

ABSTRACT: The authors study the effect of temperature on the dark potential reduction in xerographic layers. The potential relaxation process is studied in selenium from 10 to 60°C. The xerographic films were produced by vaporizing selenium in a vacuum of $5\cdot10^{-4}$ mm Hg on Duralumin substrates. A dynamic electrometer was used for measuring the relaxation in dark potential. An EN?-1 oscillograph was used as the indicator at the output of the electrometer amplifier. The potential was measured one second after charging. It was found that dark relaxation of the potential at

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various temperatures may be described by hyperbolic curves of the type

$$V = \frac{V_0}{(1+at)^{\alpha}}, \qquad (1)$$

where V_0 is the initial potential; V is the potential at time t; a and α are parameters of the hyperbola which depend on the temperature and conditions under which the layer was prepared. The change in potential for freshly prepared selenium film conforms to two or, occasionally, three hyperbolas. The time for transition from the first hyperbola to the second depends on temperature. After three or four months, the potential relaxation of the layers conforms to a single hyperbola. The drop in potential is similar for both positively and negatively charged layers, with differences only in the numerical values of the parameters a and α. Values of α were found to vary from 0.05 to 0.90. The rate of dark discharge is a linear function of temperature in most cases. Experimental results showed that instantaneous relaxation time at the given potential is an exponential function of temperature and is determined by the following expression:

$$\Theta = R_{eff} \cdot C_{eff} = \Theta(V)\, e^{-\frac{\Delta E}{kT}}. \qquad (2)$$

where R_{eff} and C_{eff} are the effective resistance and capacitance of the layer respectively. T is the temperature, ΔE is the activation energy. This expression holds

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ACC NR: AT6012819

for both positively and negatively charged layers. The activation energy differs only slightly for the various layers and the average is 0.54±0.05 and 0.28±0.05 ev for positively and negatively charged layers respectively. A theoretical explanation is given for the experimental results. Orig. art. has: 6 figures, 1 table, 2 formulas.

SUB CODE: 20/ SUBM DATE: 15Jun64/ ORIG REF: 002/ OTH REF: 002

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L 29608-66 EWT(1)/EWT(m)/EWP(t)/ETI IJP(c) AT/JD
ACC NR: AT6012822 SOURCE CODE: UR/2910/65/005/001/0129/0134

47
B+1

AUTHOR: Vishchakas, Yu. K.; Viscakas, J.; Vaytkus, Yu. Yu.; Vaitkus, J.

ORG: Vilnius State University im. V. Kapuskas (Vil'nysskiy Gosudarstvennyy universitet)

TITLE: Spectral distribution of photoconductivity in polycrystalline cadmium selenide layers

SOURCE: AN LitSSR. Litovskiy fizicheskiy sbornik, v. 5, no. 1, 1965, 129-134

TOPIC TAGS: cadmium selenide, photoconductivity, polycrystalline film, spectral distribution

ABSTRACT: The spectral distribution of photoconductivity parameters was measured in polycrystalline layers of cadmium selenide with a constant number of incident quanta. It was found that the photocurrent yield of the specimens is a complex function of the exposure conditions. Bias lighting gives clear reproducible results. Relaxation time is independent of incident wavelength for a constant photocurrent and the minimum relaxation time corresponds to maximum stationary photocurrent. The

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ACC NR: AT6012822

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initial differential instantaneous relaxation time is independent of wavelength at high frequencies and increases at lower frequencies. The selectivity of spectral distribution is not significantly affected by an increase in light intensity. Stationary bias lighting reduces selectivity of the spectral distribution by increasing the photosensitivity in the short wave region and reducing it in the long wave region. Maxima in the photoconductivity sometimes appear when the light intensity is increased. The spectral distribution of the photocurrent yield and relaxation time may be due to additional fast recombination centers on the surface and within the layers. The maxima in photosensitivity are due to the structure of the valence band. An increase in the dark conductivity of the layers increases the absolute stationary photocurrent which may be due to filling of capture levels without hole injection. The injection of holes by stationary bias lighting reduces photocurrent since there is an increase in recombination through the electron-filled capture level. This effect is stronger in the case of volume absorption which indicates an increase in recombination speed within the layer. Orig. art. has: 5 figures.

SUB CODE: 20/ SUBM DATE: 18Jun64/ ORIG REF: 006/ OTH REF: 004

Card 2/2 cc

CALINICENCO, N.; REZLESCU, N.; VISCRIAN, I.

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(GASTRIC JUICE chem.)

(PROTEINS, chem.)

SOV/146-1-1-4/22

AUTHOR: Karandeyev, K.B., **Corresponding Member** Doctor of Technical Sciences; Vishenchuk, I.M., Senior Scientific Collaborator; Sheremet'yev, V.A., Senior Engineer

TITLE: An Electric Phase Meter for Measuring and Oscillographing the Rotor Coasting Angle of Synchronous Machines (Elektronnyy fazometr dlya izmereniya i ostsillografirovaniya ugla vybega rotora sinkhronnykh mashin)

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy - Priborostroyeniye, 1958, Nr 1, pp 22-27 (USSR)

ABSTRACT: The paper proposes a circuit for a phase meter to measure and oscillograph with little phase angle lag, which is essentially free from the normal defects. The lag in this circuit is 0.2 m/sec, it narrows the measuring limits of the angle to 3-4 electric degrees. The semi-variable resistances of 100 k ohm in the control grid circuit of the phantastron generator is for correcting sensitivity and makes it possible to

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establish nominal phase meter measuring limits. The paper contains an accurate description of the phase meter switch circuit and its functions. Then comes an analysis of the errors of this phase meter, in accordance with the nature of the effects on measuring instruments. Three forms are investigated. 1) Time displacements which occur during the transmission of reference voltage and the transmitter signal in the phase meter channels; 2) The sensitivity instability of the phase meter which depends on the steepness of the sawtooth voltage, and the transmission factor of the balance-amplifier; 3) The non-linearity of the sawtooth voltage, when using the input measuring unit with a linear scale, which can also lead to errors. The paper also notes as error sources, phase displacement of reference voltage to the power transformer; the starting time of multi-vibrators, the pulse length of multi-vibrators; the electrodynamic power between the contacts of a closed electron key and the displacement

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of the zero point at the balance amplifier. Technical characteristics of the phase meter are: 3 limits for angle measurement ± 180°, ± 90°, ± 45°. Indicating instrument is a microammeter for ± 50 micro-amps. Fixing the angle ~~on~~ the oscillograph takes 0.02 secs, delay in oscillographing is practically zero. The phase meter weighs approx. 6 kg. Power consumption is not over 50 watts. The device is fed with 110 or 220 volts, at 50 cps. The phase meter measures and oscillographs the rotor coasting angle in synchronous machines within limits of ± 180 electric degrees with an accuracy of up to 0.5° plus 1%. The phase meter works harmoniously with the electromagnetic phase transmitter, which transmits the electrodynamic power, and voltage in pulse form. There are 1 circuit diagram, 6 diagrams, 1 table and 5 Soviet references.

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ASSOCIATION: L'vovskiy politekhnicheskiy institut (Lvov Polytechnical Institute)

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S/081/63/000/002/022/088
B166/B138

AUTHOR: Viscrian, Ion

TITLE: Carbon 14 in nature and its determination

PERIODICAL: Referativnyy zhurnal. Khimiya, no. 2, 1963, 152, abstract 2E16 (Studii si cercetări stiint. Acad. RPR Fil. Iasi. Fiz. si stiinte tehn., v. 12, no. 1, 1961, 111-120 [Rumanian])

TEXT: Methods are described for the proportional and scintillation counting of C^{14}. Data are given on the quantity of recent C^{14} in various plants and trees in different regions of the Earth. The half-life of C^{14} and the limits to dating by the C^{14} method are examined with the aid of published data. [Abstracter's note: Complete translation.]

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